

USSN 10/561,773

RECEIVED
CENTRAL FAX CENTER

2

SEP 02 2008

Amendments to the Claims

Please cancel claims 2 and 3, and amend claims 1-17, all without prejudice or disclaimer, as indicated in the following Listing of Claims.

Listing of Claims

1. (Currently amended) A fuel system for supplying pressurised fuel to a plurality of fuel injectors (14a-14f), the fuel system comprising:

an accumulator assembly (16) having first and second accumulator volumes (18, 20) defined within a common accumulator housing (22),

supply means (42) for supplying fuel at a supply pressure level to the first accumulator volume (18), and

a plurality of unit pumps (10a-10f) for receiving fuel at the supply pressure level from the first accumulator volume (18) and for pressurising said fuel to an first injectable pressure level for supply to the second accumulator volume (20),

wherein each unit pump (10a-10f) includes a pumping plunger (50) for pressuring fuel within an associated pump chamber (52) and

wherein each unit pump is being integrated with the common accumulator housing (22) by mounting within an opening or cross bore provided therein so as to pass through the common accumulator housing so as to permit communication between the first accumulator volume (18) and the pump chamber (52) and, respectively, the first accumulator volume and the second accumulator volume internally within the accumulator housing (22).

2. (Cancelled)

3. (Cancelled)

4. (Currently amended) The fuel system as claimed in ~~any one of~~ claims 1 to 3, wherein the accumulator assembly is a rail assembly (16) comprising a first rail volume (18) and a second rail volume (20) housed within a rail housing (22).

USSN 10/561,773

3

5. (Currently amended) The fuel system as claimed in claim 4, wherein the first rail volume (18) communicates with the pump chamber (52) of each unit pump (10a-10f) internally within the accumulator housing (22) via first valve means (56).

6. (Currently amended) The fuel system as claimed in claim 5, wherein the first rail volume (18) is communicable with the pump chamber (52) of each unit pump (10a-10f) through a non-return valve (56) having an open position, in which the pump chamber (52) communicates with the first rail volume (56), and a closed position in which said communication is broken.

7. (Currently amended) The fuel system as claimed in claim 6, wherein the second rail volume (20) is communicable with the pump chamber (52) of each unit pump (10a-10f) through second valve means (58).

8. (Currently amended) The fuel system as claimed in claim 7, wherein the second valve means is a rail control valve (58) operable between an open position in which fuel at the injectable pressure level, being a first injectable pressure level, is supplied from the second rail volume (20) to the injectors (14a-14f) and a closed position in which communication between the pump chamber (52) of a unit pump and the second rail volume (20) is broken so that the unit pump (10a-10f) is operable to increase fuel to a second injectable pressure level.

9. (Currently amended) The fuel system as claimed in claim 8, wherein the rail control valve (58) includes an electro-magnetically operable valve which is movable between the open and closed positions by application of an electrical control signal.

10. (Currently amended) The fuel system as claimed in any one of claims 4 to 9, wherein the supply means includes a transfer pump (42) for supplying fuel at supply pressure to the first rail volume (18) and, hence, to each unit pump (10a-10f) through the first valve means (56).

USSN 10/561,773

4

11. (Currently amended) The fuel system as claimed in any one of claims 4 to 10, wherein the first and second rail volumes (18, 20) are arranged side-by-side, or substantially in parallel with one another, within the rail housing (22).

12. (Currently amended) The fuel system as claimed in any one of claims 1 to 11, including a plurality of injectors (14a-14f) for receiving fuel at an injectable pressure level from the pump chamber (52) of an associated unit pump (10a-10f) and/or from the second accumulator volume (20).

13. (Currently amended) The fuel system as claimed in claim 12, including a plurality of unit pumps (10a-10f) each of which forms a common unit with one of the injectors (14a-14f).

14. (Currently amended) The fuel system as claimed in any one of claims 1 to 13, including nozzle control valve means (36) operable to control the timing of commencement of injection at a first and/or a second injectable pressure level.

15. (Currently amended) The fuel system as claimed in claim 14, wherein the nozzle control valve means includes a nozzle control valve (36) that is operable to control fuel pressure within an injector control chamber (44) so as to permit control of injection timing at the first and/or the second injectable pressure level.

16. (Currently amended) An accumulator assembly for a common rail fuel system having a plurality of unit pumps (10a-10f), the accumulator assembly including an common accumulator housing (22) within which is defined a first accumulator volume (18) for fuel at a supply pressure level and a second accumulator volume (20) for fuel at an first injectable pressure level, wherein the common accumulator housing (22) is provided with at least one opening (24a-24f) for receiving, within which a unit pump (10a-10f) is receivable, in use, so that a pump chamber (52) of each unit pump (10a-10f) is communicable, respectively, with the first accumulator volume (18) and the second accumulator volume internally within the common accumulator housing (22).

USSN 10/561,773

5

17. (Currently amended) The accumulator assembly as claimed in claim 16, wherein the first accumulator volume is a first rail volume (18) and the second accumulator volume is a second rail volume (20), both of which are defined within a rail housing (22).